

### **In the Drawings**

Enclosed are replacement sheets for Figures 2, 17, 32, 33, 51 and 52(b).

FIG 2. ----addition of  $\alpha_e$  and  $\alpha_h$  ---

FIG. 17. ---changed P1 to P11, changed P1 to P12, changed P2 to P21, changed P2 to 22, changed P3 to P31, changed P3 to P32, changed P4 to P41, changed P4 to P42----

FIG. 32 -----addition of B0, S2 and Px-----

FIG. 33 -----addition of  $\theta_2$ ,  $\theta_3$ ,  $\theta_4$ -----

FIG. 51 ---changed P1 to P11, changed P1 to P12-----

FIG. 52(b) ---addition of  $\theta_b$ ---

## REMARKS

This Amendment is submitted in response to the Office Action dated December 19, 2005. The Examiner's comments have been carefully considered. Applicant believes the Amendment to be fully responsive to the Office Action for the reasons set forth below. The Examiner's comments have been carefully considered. Applicants have amended the claims and respectfully submit that all the claims currently in this application are patentable over the objections and rejections of record.

In the Office Action, the Examiner made the restriction requirement final. Claims 1-15, 38, and 74-81 were withdrawn from consideration. Applicants unwillingly accepts the Examiner's decision and, in keeping, requests that non-elected claims 16-38 and 82-110 be cancelled, without prejudice to their assertion in a duly filed divisional application. Via this amendment, the Specification and claims 1-15 are amended herein. No new matter is added via this amendment.

In items 5-12 of the Office Action, the Examiner objected to the drawings, the specification, and the claims because of informalities.

Via this Amendment, Applicants submit replacement drawings for FIGs. 2, 17, 32, 33, 51, and 52(b). Regarding item 7 of the Office Action, the drawings have been corrected in Figure 17, and the specification has been amended to comply with the FIGs. 19 and 39. Commas have been added to claims 4, 5 and 12. In the specification, the trademark FLEX CHIP is now cited correctly and accompanied by the generic terminology "Kinetic Analysis System" (*HTS Biosystems*) where it appears.

In items 13-23 of the Office Action, the Examiner rejected claim 1-15, 38, and 74-81 under 35 U.S.C. § 112, second paragraph, as indefinite.

Regarding the indefiniteness rejection of claim 1 raised in item 15 of the Office Action, the phrase "on each of which a diffraction grating with a uniform groove orientation and a uniform groove pitch is formed so as to generate an evanescent wave upon light irradiation" refers to "a plurality of diffraction grating surfaces", not to "a metal layer". Claim 1 has been amended for clarification.

Claims 1, 2, 4 and 38 were rejected as indefinite with respect to the phrase “so as to” and claims 1, 2, 3, and 38 were rejected as indefinite with respect to the phrase “in such a manner”. The Examiner stated it is unclear whether the limitations following these phrases are part of the claimed invention. Claim 5 was rejected for lack of antecedent basis.

Applicants have amended claims 1, 3 and 4 herein to remove these phrases. Claims 2 and 38 were cancelled via this amendment. Proper antecedent basis has been added to Claim 5.

Claims 8 and 13 were rejected for the use of the word “concentratedly” which the Examiner states is a relative term. Further, the Examiner alleges the use of the word “associated” at lines 3 and 12 of claim 13 is vague and indefinite.

Claims 8 and 13 have been amended to delete the word “concentratedly”. However, Applicants maintain that with regard to the term “concentrated”, one of ordinary skill in the art, in view of the prior art, would be reasonably apprised of the scope of the invention. Applicants have deleted the word “associated” from lines 3 and 12 of Claim 13.

In view of the Amendments to the claims, as set forth above, Applicants believe that the Examiner’s rejections under 35 U.S.C. §112, second paragraph, have been overcome and therefore, respectfully request that the rejections be withdrawn.

In items 24 and 25 of the Office Action, the Examiner rejected claims 1, 2, 6, 7, 38, and 74-77 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 5,994,150 to Challenger, *et al.* (hereinafter “the Challenger patent”).

In items 26-32 of the Office Action, the Examiner rejected claims 3-5, 8, 9, 11, 12, 14, 15, and 79-81 under 35 U.S.C. § 103(a) as being unpatentable over Challenger in view of Knoll (U.S. Patent No. 5,442,448) and/or Malmqvist et al (U.S. Patent No. 5,994,150).

In items 33 and 34 of the Office Action, the Examiner considered claims 10, 13, and 78 as directed to allowable subject matter.

In order to overcome the 35 U.S.C. § 102 and 103 rejections, Applicants have amended claim 1 by incorporating the feature recited in original claim 2. Accordingly, claim 2 has been

cancelled. The subject matter of currently-amended claim 1 differs from the Challenger patent at least in the following two points:

(i) Currently-amended claim 1 recites that the subject surface plasmon resonance sensor chip comprises plural diffraction grating surfaces each having a diffraction grating with a uniform groove orientation and a uniform groove pitch, whereas Challenger fails to disclose or suggest plural diffraction grating surfaces as recited in currently-amended claim 1. Fig. 8 of the Challenger patent discloses plural surfaces having diffraction gratings, although the diffraction gratings are formed with different groove pitches.

(ii) Currently-amended claim 1 recites that each of the diffraction grating surfaces forms a predetermined inclination angle with the reference plane, whereas the Challenger patent fails to disclose or suggest plural diffraction grating surfaces forming different inclination angles as recited in currently-amended claim 1.

Inasmuch as the Challenger patent is totally silent about the feature of currently-amended claim 1, it cannot anticipate same. In the absence of a considerable reconstruction to this cited reference, one skilled in the art would not reach the subject matter of currently-amended claim 1.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account 50-1290.

Respectfully submitted,



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